# Aspire M5200 Aspire M3200 Aspire M1200 Service Guide

Service guide files and updates are available on the AIPG/CSD web; for more information please refer to <a href="http://csd.acer.com.tw">http://csd.acer.com.tw</a>

# Revision History

Please refer to the table below for the updates made on Aspire M5200/Aspire M3200/ Aspire M1200 service guide.

Date	Chapter	Updates

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## **Conventions**

The following conventions are used in this manual:

SCREEN	Denotes actual messages that appear on screen.	
MESSAGES		
NOTE	Gives bits and pieces of additional information	
	related to the current topic.	
WARNING	Alerts you to any damage that might result from	
	doing or not doing specific actions.	
CAUTION	Gives precautionary measures to avoid possible	
	hardware or software problems.	
IMPORTANT	Remind you to do specific actions relevant to the	
	accomplishment of procedures.	

### **Preface**

Before using this information and the product it supports, please read the following general information.

- 1. This Service Guide provides you with all technical information relating to the BASIC CONFIGURATION decided for Acer's "global" product offering. To better fit local market requirements and enhance product competitiveness, your regional office MAY have decided to extend the functionality of a machine (e.g. add-on card, modem, or extra memory capability). These LOCALIZED FEATURES will NOT be covered in this generic service guide. In such cases, please contact your regional offices or the responsible personnel/channel to provide you with further technical details.
- 2. Please note WHEN ORDERING FRU PARTS, that you should check the most up-to-date information available on your regional web or channel. If, for whatever reason, a part number change is made, it will not be noted in the printed Service Guide. For ACER-AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code to those given in the FRU list of this printed Service Guide. You MUST use the list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

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## System Specifications

### **Features**

### **Operating System**

☐ Microsoft Windows Vista (Home Basic, Home Premium, Business)

#### **Processor**

- □ Socket Type: AMD940
- □ Processor Type:
  - □ Phenom(95W) / Athlon 64 X2 / Athlon 64/ Sempron CPUs

### Chipset

□ RS780/RS740 + RS700

#### **PCB**

- □ Form Factor: uATX
- □ Dimension/Layer: 243.84cm x 243.84cm

### Memory

- □ Memory Type: DDR2 667/800
- □ Support single channel 64 bit mode with maximum memory size up to 8GB
- □ Support un-buffered DIMM (RS780/RS740)
- □ DIMM Slot: 4
- □ Memory Max: 256Mb/512Mb/1Gb/2Gb devices technologies
- □ Capacity: Up to 2GB per DIMM with maximum memory size up to 8GB

### **PCI**

- □ PCI Express Slot Type: x16
  - □ PCI Express x16 Slot Quantity: 1
- □ PCI Express Slot Type: x1
  - □ PCI Express x1 Slot Quantity: 1
- □ PCI Slot Type: PCI 2.3 5V slots
  - □ PCI Slot Quantity: 2

#### **FDD**

- □ Slot Quantity: 1
- □ Design Criteria:
  - □ Should support 1.44MB/3 mode 3.5" Devices

#### **IDE**

- ☐ Slot Type: 40pin PATA IDE slot
  - □ Slot Quantity: 1
  - □ Transfer rate support:
    - > PIO Mode: 0/1/2/3/4
    - > ATA mode: 33/66/100/133
  - □ Storage Type support:
    - HDD/CD-ROM/CD-RW/DVD-ROM/DVD-RW/DVD+ RW/DVD Dual/DVD SuperMultiPlus/HD DVD/BlueRay DVD

#### **SATA**

- □ Slot Type: SATA slot
- □ Slot Quantity: 6
- **□** Storage Type support:
  - □ HDD/CD-ROM/CD-RW/DVD-ROM/DVD-RW/DVD+RW/DVD

    Dual/DVD SuperMultiPlus/Blu-Ray ODD

### Audio

- ☐ Audio Type: HD audio codec
- □ Audio Channel: 7.1 channel
- □ Audio Controller /Codec: ALC888S HD codec 7.1
- **□** Connectors support:
  - □ Rear 6 jack follow HD audio definition, example as below
  - □ Audio jacks color coding: should meet Microsoft Windows Logo

	□ 1 S/PDIF-out header (1*4)
	□ 1 AUX-In header (1*4)
	□ 1 front panel audio header (2*5)
	$\hfill\Box$ Add HD de-pop CKT (the attachment is the reference, please propose
	your solution)
	□ S/N ratio: 90 dB at rear output jack
<i>LAN</i>	
	MAC Controller: Marvell 8071 Gigabit Ethernet controller
	Should be worked under 10/100/1000Mbs environment
	PHY: Realtek 8211BL Gigabit Ethernet Phy.
<b>USB</b>	
	Controller Type: RS780M03A1-8KRS2H
	Ports Quantity: 12
	□ 4 back panel ports
	□ On-board: 3 2*5 headers
	<ul><li>4 ports for front daughter board</li></ul>
	■ 6 ports for rear I/O
	2 ports for internal card reader.
	□ Connector Pin: standard Intel FPIO pin definition
	Data transfer rate support:
	□ USB 2.0/1.1
<i>1394</i>	
	Controller: Jmicron JM831 1394a controller
	Connector Quantity: 2
	□ 1 rear 6pin IEEE1394 port
	□ 12x5pin onboard jumper

 $Program\ Device\ Requirements:\ Audio-0002$ 

#### **BIOS**

- □ BIOS Type: Phoenix Award or AMI Kernel with Acer skin
- □ Size: 8Mb
- □ Note:
  - □ Boot ROM should be included (PXE function should be built in with default and RPL function is optional by service BIOS)
  - □ BIOS shall auto detect FDD to avoid checksum error when boot

#### I/O Connector

□ Controller: Super I/O ITE IT8718F (F stepping or after; must full support Intel platform)

### Rear I/O Connector

- □ 1 PS/2 Keyboard port,
- □ 1 PS/2 Mouse port,
- □ 1 COM port
- □ 1 VGA port
- □ 1 HDMI port (Aspire M3000/5000 series only),
- □ 1 RJ45 LAN port,
- □ 1 IEEE 1394 port (6 pin) (Aspire sku only)
- □ 2 USB ports
- □ 7.1 channel phone jack (6 audio jacks)

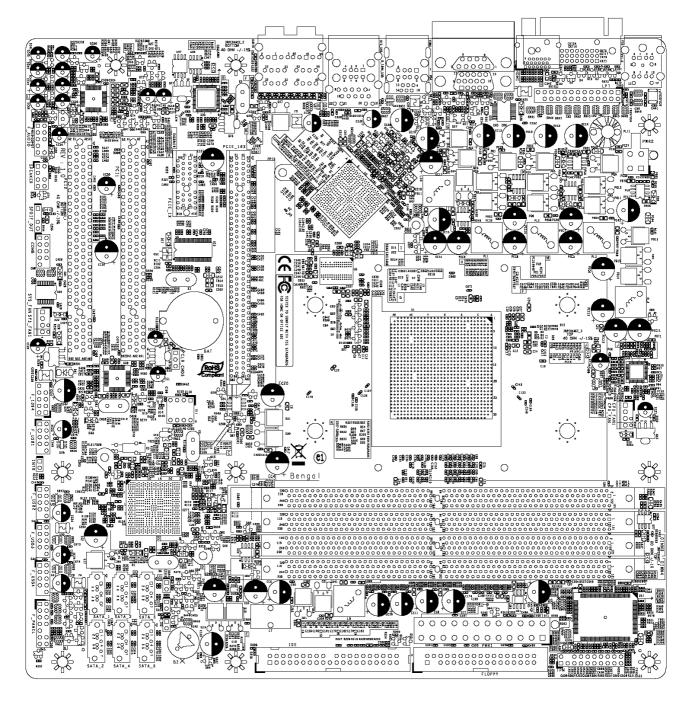
### On-board connectors

- □ 1 CPU socket
- □ 4 DDR- memory sockets
- □ 1 PCI Express x16 slot
- □ 1 PCI Express x 1 slot
- □ 2 PCI slots
- □ 1 FDD slot

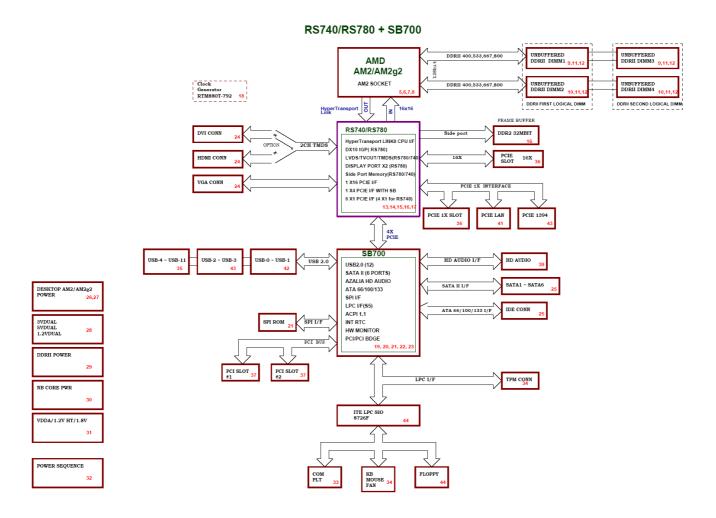
	1 PATA connector		
	6 SATA connectors		
	3 2*5 pin Intel FPIO specification USB pin connectors (follow Intel FPIO		
	standard Specification)		
	1 2*5 pin IEEE1394 jumper (reserve header on all SKU)		
	12*5 pin Intel FPIO spec. Microphone In/ Headphone Out pin connectors		
	1 serial port 2*5 pin connector (reserve header on all SKU)		
	1 AUX-In 4pin connector		
	1 1*4 S/PDIF out header (reserve header on all sku)		
	1 4 pin CPU Fan connector		
	1 3 pin System FAN connector with linear circuit		
	1 24pin + 4pin ATX interface PS3/PS2 SPS connector		
	1 2*7 pin front panel IO header		
	1 Jumper for clear CMOS		
	1 on board buzzer		
	Color management for on board connecter (pls provide proposal)		
Powe	er Supply		
	Power Supply Mounting Features		
	□ Chassis accepts ATX-style power supply		
	□ Chasses accepts PS2, PS3 style power supply		
	□ Features for internal mounting tab		
	□ Location of 4 external mounting holes		
	Power Supply Electrical Design Feature		
	□ 300W/250W in stable mode (Acer Assign System Power Unit)		
	□ Design for Intel Broadwater/ICH8 series chipset compatible system		
	$\Box$ Voltage design should be covered +5V, +3.3V, +12V, +5VSB, -12V		
	(attention to 12V output capability)		

- □ Demand for both PFC/Non-PFC solutions (two different quotations are needed)
- Minimum 2 Serial ATA power connector solution should be included (by default)
- □ Minimum 3 big 4-pin power connector included
- $\quad \ \, \Box \quad Minimum \ 1 \ small \ 4 \hbox{-pin power connector included} \\$
- □ PFC version will not provide switch selector for 115/230V AC input but it should be universal for Europe and China
- □ Non-PFC version should provide switch selector for 115/230V AC input and universal for worldwide
- □ PS2 style

## Main board Placement

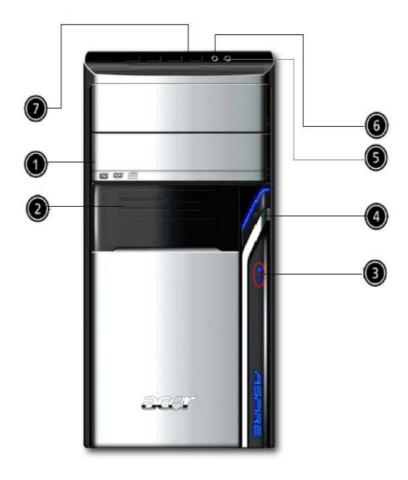


## **Block Diagram**



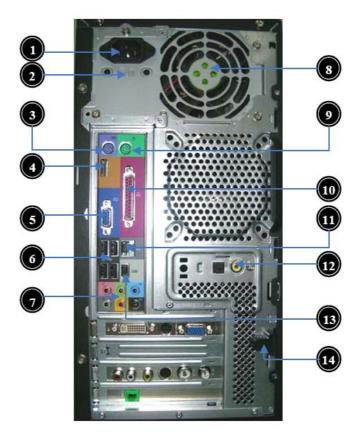
## Aspire M5200 Front Panel

The computer's front panel consists of the following:



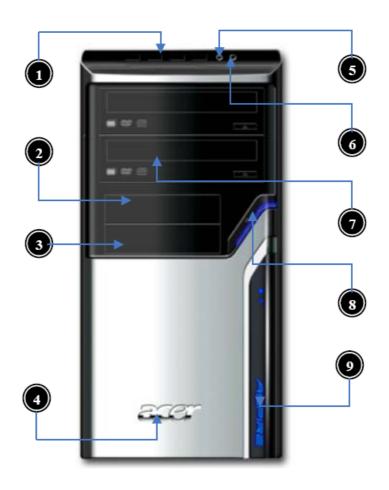
<b>Label</b>	Description	
1	Optical drive	
2	Card reader	
3	Power and HDD LED	
4	Power button	
5	Speaker or headphone	
6	Microphone jack	
7	USB ports	

# Aspire M5200 Rear Panel



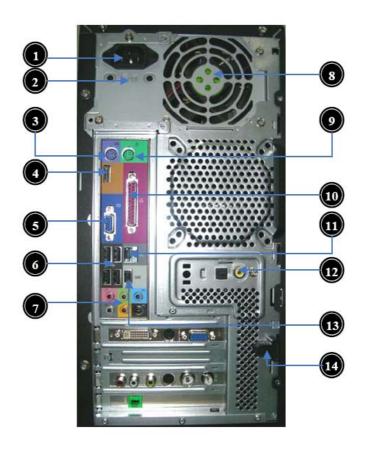
Label	Description	Label	Description
1	Power card socket	8	Fan aperture
2	Voltage selector switch	9	PS/2 mouse connector
3	PS/2 keyboard connector	10	Printer connector
4	HDMI port	11	LAN port
5	Monitor connector	12	SPDIF port
6	USB 2.0 ports	13	1394 port
7	Audio port	14	Lock Handle

# Aspire M3200 Front Panel



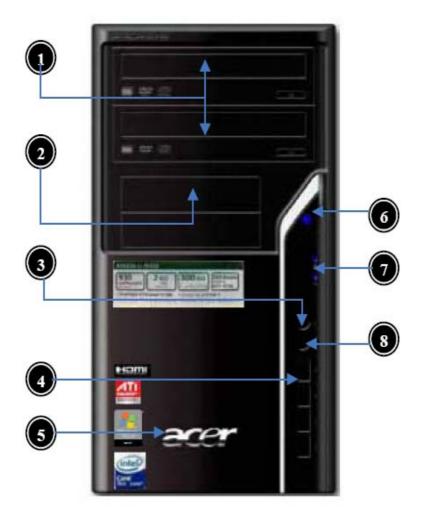
Label	Description	
1	USB ports	
2	Floppy disk drive	
3	Card reader cover	
4	Acer Logo	
5	Microphone jack	
6	Speaker or headphone	
7	Optical drive	
8	Power button	
9	LED module	

# Aspire M3200 Rear Panel



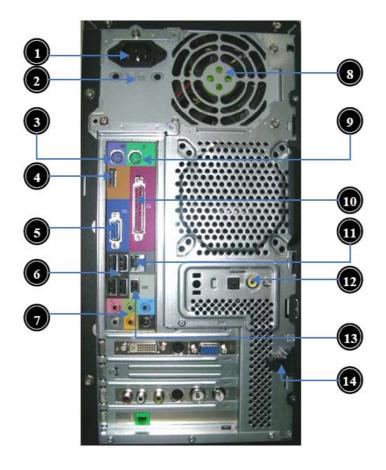
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4	HDMI port	11	LAN port
5	Monitor connector	12	SPDIF port
6	USB 2.0 ports	13	1394 port
7	Audio port	14	Lock Handle

# Aspire M1200 Front Panel



Label	Description
1	Optical drive
2	Floppy disk drive
3	Speaker or headphone
4	USB Ports
5	Acer Logo
6	Power button
7	LED Module
8	Microphone jack

# Aspire M1200 Rear Panel



Label	Description	Label	Description
1	Power card socket	8	Fan aperture
2	Voltage selector switch	9	PS/2 mouse connector
3	PS/2 keyboard connector	10	Printer connector
4	HDMI port	11	LAN port
5	Monitor connector	12	SPDIF port
6	USB 2.0 ports	13	1394 port
7	Audio port	14	Lock Handle

# Hardware Specifications and Configurations

### **Processor**

Item	Specification	
Туре	Processor Type: Phenom(95W) / Athlon 64 X2 /	
	Athlon 64/ Sempron CPUs	
Socket	AMD Socket AM2+ (940 pin)	
Minimum operating speed	0 MHz (If Stop CPU Clock in Sleep State in BIOS	
	Setup is set to Enabled.)	

### **BIOS**

Item	Specification
BIOS code programmer	Phoenix Award or AMI Kernel with Acer
	skin
BIOS version	V6.0
BIOS ROM type	SPI Flash
BIOS ROM size	8Mb
Support protocol	SMBIOS (DMI) 2.4/DMI 2.0 (log file)
Device Boot Support	- 1st priority: SATA HDD
	- 2nd priority: CD-ROM
	- 3rd priority: FDD
	- 4th priority: LAN
	- 5th priority: USB device
Support to LS-120 drive	YES
Support to BIOS boot block	YES
feature	

### **BIOS Hotkey List**

Hotkey	Function	Description
Del	Enter BIOS Setup Utility	Press while the system is booting to
		enter BIOS Setup Utility.

## Main Board Major Chips

Item	Specification
North Bridge	RS780/RS740
South Bridge	RS700
APG controller	RS780/RS740
Super I/O controller	ITE IT8718F
Audio controller	Realtek HD audio codec ALC888S HD codec 7.1
	(co-lay with ALC888)
LAN controller	Realtek 8211BL Gigabit Ethernet Phy.
HDD controller	RS700
Keyboard controller	ITE IT8718F

## **Memory Combinations**

Slot	Memory	Total Memory
Slot 1	256Mb/512Mb/1Gb/2Gb	256MB~2GB
Slot 2	256Mb/512Mb/1Gb/2Gb	256MB~2GB
Maximum System N	Memory Supported	256MB~8GB

## System Memory

Item	Specification
Memory slot number	4 slot
Support Memory size per socket	256Mb/512Mb/1Gb/2Gb
Support memory type	DDR2
Support memory interface	DDR2 800MHz
Support memory voltage	1.8V
Support memory module package	240-pin DDR2
Support to parity check feature	Yes
Support to error correction code	No
(ECC) feature	
Memory module combinations	You can install memory modules in any

combination as long as they match the
above specifications.

### Audio Interface

Item	Specification
Audio controller	RS780/RS740
Audio controller type	ALC888S
Audio channel	codec 7.1
Audio function control	Enable/disable by BIOS Setup
Mono or stereo	Stereo
Compatibility	Sound Blaster Pro/16 compatible
	Mixed digital and analog high
	performance chip Enhanced stereo
	full duplex operation High
	performance audio accelerator and
	AC'97 support Full native DOS
	games compatibility Virtual FM
	enhances audio experience through
	real-time FM-to-Wavetable
	conversionMPU-401 (UART mode)
	interface for Wavetable synthesizers
	and MIDI devices Integrated dual
	game port Meets AC'97and WHQL
	specifications
Music synthesizer	Yes, internal FM synthesizer
Sampling rate	48 KHz (max.)
MPU-401 UART support	Yes
Microphone jack	Supported
Headphone jack	Supported

## SATA Interface

Item	Specification
SATA controller	RS780/RS740
SATA controller resident bus	PCI bus
Number of SATA channel	SATA X 6

Support bootable CD-ROM	YES

## Floppy disk drive Interface

Item	Specification
Floppy disk drive controller	ITE IT8718F
Floppy disk drive controller resident bus	ISA bus
Support FDD format	360KB, 720KB, 1.2MB, 1.44MB,
	2.88MB

### Parallel Port

Item	Specification
Parallel port controller	ITE IT8718F
Parallel port controller resident bus	ISA bus
Number of parallel parts	1
Support ECP/EPP	SPP / Bi-directional / ECP / EPP
Connector type	25-pin D-type female connector
Parallel port function control	Enable/disable by BIOS Setup
Optional EV+CP DMA channel (in	DMA channel 1
BIOS setup)	DMA channel 3
Optional parallel port I/O address	378h
(via BIOS setup)	278h
Optional parallel port IRQ (via	IRQ5
BIOS setup)	IRQ7

### **USB Port**

Item	Specification
Universal HCI	USB 2.0/1.1
USB Class	Support legacy keyboard for legacy
	mode
USB Connectors Quantity	4 ports for front daughter board
	6 ports for rear I/O
	2 ports for internal card reader.

## **Environmental Requirements**

Item	Specification
Temperature	
Operating	+5°C ~ +35°C
Non-operating	-20 ~ +60°C (Storage package)
Humidity	
Operating	15% to 80% RH
Non-operating	10% to 90% RH
Vibration	
Operating (unpacked)	5 ~ 500 Hz: 2.20g RMS random, 10 minutes per axis
	in all 3 axes
	$5 \sim 500$ Hz: 1.09g RMS random, 1 hour per axis in all 3
	axes

### Power Management

Devices	S1	S3	S4	S5
Power Button	V	V	V	V
USB Keyboard/Mouse	V	V	N/A	N/A
PME	Disabled	Disabled	Disabled	Disabled
RCT	Disabled	Disabled	Disabled	Disabled
WOR	Disabled	Disabled	Disabled	Disabled

- □ Devices wake up from S3 should be less than
- $\hfill\Box$  Devices wake up from S5 should be less than 10 seconds

## System Utilities

The manufacturer or the dealer already configures most systems. There is no need to run Setup when starting the computer unless you get a Run Setup message.

The Setup program loads configuration values into the battery-backed nonvolatile memory called CMOS RAM.

This memory area is not part of the system RAM.

**NOTE:** If you repeatedly receive Run Setup messages, the battery may be bad/flat. In this case, the system cannot retain configuration values in CMOS.

Before you run Setup, make sure that you have saved all open files. The system reboots immediately after you exit Setup.

## **Entering Setup**

Power on the computer and the system will start POST (Power On Self Test) process. When the message of "Press DEL to enter SETUP" appears on the screen, press the key of [Delete] to enter the setup menu.

**NOTE:** If the message disappears before you respond and you still wish to enter Setup, restart the system by turning it OFF and On. You may also restart the system by simultaneously pressing [Ctrl+ Alt+ Delete].

The Setup Utility main menu then appears:

CMOS Setup Utiliyt – Copyright (c) 1985-2008, American Megatrends, Inc.		
Product Information  Standard CMOS Features  Advance BIOS Features  Advanced Chipset Features  Integrated Peripherals  Power Management Setup	PC Health Status Frequency Control Load Default Settings Set Supervisor Password Set User Password Save & Exit Setup	
PnP/PCI Configuration  Esc: Quit ↑↓←	Exit Without Saving  → : Select Item	
F10: Save & Exit Setup		

The items in the main menu are explained below:

Parameter	Description
Production Information	This page shows the relevant information of the main board
Standard CMOS Features	This setup page includes all the items in standard compatible BIOS
Advance BIOS Features	This setup page includes all the items of Award special enhanced features
Advance Chipset Features	This setup page includes all advanced chipset features
Integrated Peripherals	This setup page includes all onboard peripherals
Power Management	This setup page includes all the items of Green function
Setup	features
PnP/PCI Configuration	This setup page includes all configurations of PCI & PnP ISA
	resources
PC Health Status	This setup page is the System auto detect Temperature,
	voltage, and fan speed
<b>Load Optimized Defaults</b>	Load Optimized Settings Default Settings indicates the value
	of the system parameters which the system would be in best
	performance configuration
Set Supervisor Password	Change, set or disable password. It allows you to limit access
	to the system and Setup, or just to Setup
Set User Password	Change, set or disable password. It allows you to limit access
	to the System
Save & Exit Setup	Save CMOS value settings to CMOS and exit setup
Exit Without Saving	Abandon all CMOS value changes and exit setup

## **Product Information**

The screen below appears if you select Product Information from the main menu: The Product Information menu contains general data about the system, such as the product name, serial number, BIOS version, etc. This information is necessary for troubleshooting (maybe required when asking for technical support).

CMOS Setup Utiliyt – Copyright (c) 1985-2008, American Megatrends, Inc. Product Information		
Product Name	Aspire M1200/3200/5200	Item Help
System S/N System Manufacture Name Main Board Manufacture Name System BIOS Version	000000000 Acer Acer R01-A0	Menu Level ▶
BIOS Release Date  ↑↓←→: Move ENTER: Select Ite F5: Previous		Save ESC: Exit F1: General Help Optimized Defaults

The following table describes the parameters found in this menu:

Parameter	Description
Production Name	This item lists the product name
System S/N	This item lists the system serial number
System BIOS Version	This item lists the system BIOS version
System BIOS ID	This item lists the system BIOS ID
BIOS Release Date	This item lists the BIOS release date

## Standard CMOS Setup

Select standard CMOS features from the main menu to configure some basic parameters in your system the following screen shows the standard CMOS features menu:

Standard CMOS Features			
Day- Date (MM:DD:YY)	Mon 02/18/2008	Item Help	
System Time	16:03:42		
Base Memory Size	640K		
Extended Memory Size	4095MB	Menu Level ▶	
Total Memory Size	4096MB		
NDE OL LON		Change the day, month, year and the	
IDE Channel 0 Maser	[None]		
IDE Channel 0 Slave	[None]	century	
IDE Channel 1 Master	[None]		
IDE Channel 1 Slave	[SATA: 3M-ST3320820A]		
▶ IDE Channel 2 Slave	[CD/DVD; 4M-HL-DT-ST]		
▶ IDE Channel 3 Slave	[None]		
▶ IDE Channel 4 Slave	[None]		
▶ IDE Channel 5 Slave	[None]		
Video Setting	[EGA/VGA]		
Halt on Setting	[All, But Keyboard]		
↑↓←→: Move ENTER: Select Item +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help			
F5: Previous Values F7: Optimized Defaults			

CMOS Setup Utiliyt – Copyright (c) 1985-2008,American Megatrends, Inc. IDE Channel x Maser/Slave			
IDE HDD Auto Detection	[Press Enter]	Item Help	
IDE Channel x Master/Slave	[Auto]	Menu Level ▶	
Access Mode	[Auto]		
Capacity	320GB	Change the day, month, year and the	
Cylinder	xxxx	century	
Head	xxxx		
Precomp	XXXX		
Landing zone	XXXX		
Sector	XXXX		
↑↓←→: Move ENTER: Select Ite	m +/-/PU/PD: Value F1	0: Save ESC: Exit F1: General Help	
F5: Previous Values F7: Optimized Defaults			

The following table describes the parameters found in this menu.

Parameter	Description	Options
Date	To set the date following the	Week: From [Sun.] to
	weekday-month-date-year format	[Sat.]. determined by
		BIOS and is display
		only
		Day: from [1] to [31] (or the
		maximum allowed in
		the month.
		Year: from 1999 to 2099
System Time	To set the time following the	The items format is [hour]
	hour-minute-second format	[minute][second]. The time
		is calculated base on the
		24-hour timer clock.
Base Memory Size	640 K for system base memory	

Parameter	Description	Options
Extended	The BIOS determines	
Memory Size	how much extended	
	memory is present	
	during the POST. This is	
	the amount of memory	
	located above 1MB in the	
	memory address map of	
	CPU	
Total Memory	Total memory size for	
Size	the system	
IDE Channel	Hard disk drive	[Enter] for detection options
X Master	connected to channel X	[Auto]: BIOS automatically detects IDE
IDE Channel	master or slave port. To	devices during POST (default)
X Slave	enter the IDE Master or	[None]: No IDE devices are used and the
	Slave setup, press	system will skip the automatic
	[Enter]. The IDE	detection step and allow for faster
	CD-ROM is always	system start up
	automatically detected	[Manual]: Manually input the correct
		settings
		[Access Mode]: To set the access mode for
		the hard drive.
		The four options are:
		CHS/LBA/Large/Auto (default: Auto)
		Cylinder: Number of cylinders
		Head: Number of heads
		Precomp: Write precomp
		Landing Zone: Landing Zone
		Sector: Number of sectors
Video Setting	Select the type of	
	primary video subsystem	
Halt on	This item enables use to	All Errors
	select the situation if the	No Errors
	BIOS stops the POST	All, But Keyboard
	process and the	All, But Diskette
	notification	All, But Disk/Key

## Advanced Setup

The following screen shows the Advanced Setup:

CMOS Setup Utiliyt – Copyright (c) 1985-2008,American Megatrends, Inc. Advanced BIOS Features			
► Hard Disk Boot Priority  Virus Warning	[Press Enter] [Disabled]	Item Help	
Quick Power on Self Test Silent Boot	[Enabled] [Enabled]	Menu Level ▶	
First Boot Device Second Boot Device	[Floppy] [Hard Disk]	Allows you to choose the Virus warning	
Third Boot Device  Boot From Other Device  Boot Up Numlock Status	[CDROM] [Enabled] [Enabled]	feature for IDE Hard Disk boot sector protection. If this function is enabled	
Security Option  APIC Mode	[Setup] [Enabled]	and someone attempt to write data into this area, BIOS will show a warning message on screen and alarm beep	
HDD S.M.A.R.T. Capability	[Disabled]		
↑↓←→: Move ENTER: Select Item +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help F5: Previous Values F7: Optimized Defaults			

The following table describes the parameters found in this menu.

Parameter	Description	Options
Hard Disk Boot	This features displays the Hard Disk Boot	[Press Enter]
Priority	Device priority from high to low and allows	
	users to set the Hard Disk Boot Device	
	Priority. Press [Enter] to enter the setting	
	screen. Use wory to select a device, then	
	press <+> to move it up, or <-> to move it	
	down the list. Press <esc> to exit.</esc>	

Parameter	Description	<b>Options</b>
Virus Warning	This feature allows you to enable the VIRUS	[Enabled], [Disabled]
	warning function for IDE Hard Disk boot sector	
	protection. If this function is enabled and there	
	is someone attempts to write data to this area,	
	BIOS will show a warning message on screen	
	and the alarm will beep.	
Quick Power	This feature allows the system to skip certain	[Enabled], [Disabled]
On Self Test	tests while booting. When this function is	
	enabled, it will decrease the time needed to boot	
	the system, which means to quick power on	
	self-test function.	
Silent Boot	This feature allows you to enable or disable if the	[Enabled], [Disabled]
	screen logo to display or not during POST	
First/Second/	The item allows you to see the sequence of boot	[Floppy], [LS120],
Third Boot	device where BIOS attempts to load the disk	[Hard Disk],
Device	operation system.	[CD-ROM], [ZIP],
		[USB-FDD],
		[USB-ZIP],
		[USB-CDROM],
		[USB-HDD], [LAN],
		[Disabled]
Boot From	This item allows user to enable or disable to boot	[Enabled], [Disabled]
Other Devices	from other device	
Boot Up	This item allows user to enable or disable to set	[Enabled], [Disabled]
NumLock	keyboard is number keys or arrow keys	
Status		
Security	This category allows you to limit access to the	[System], [Setup]
Option	system and Setup, or just to Setup.	
APIC Mode	This option is used to set up enable or disable	[Enabled], [Disabled]
	the APCI function	
HDD	S.M.A.R.T. which allows your hard disk to report	[Enabled], [Disabled]
S.M.A.R.T	any read/write errors and issue a warning when	
Capability	LDCM installed	

# Advanced Chipset Setup

CMOS Setup Utiliyt – Copyright (c) 1985-2008,American Megatrends, Inc. Advanced Chipset Features						
Dual Monitor Support Frame Buffer Size CPU Frequency Spread Spectrum HT Spread Spectrum SSE/SSE2 Instructions	[Disabled] [64MB] [200.0] [Enabled] [Disabled] [Enabled]	Item Help  Menu Level ▶				
↑↓←→: Move ENTER: Select Item +/-/PU/PD: Value F10: Save ESC: Exit F1: General Help F5: Previous Values F7: Optimized Defaults						

The following table describes the parameters found in this menu. \\

Parameter	Description	Options
<b>Dual Monitor</b>	This category allows you to enable or	[Enabled], [Disabled]
Support	disable dual monitor support function	
Frame Buffer Size	This field displays how much frame	
	buffer size of the system.	
CPU Frequency	This field allows you to determine	
	CPU frequency of the system.	

<b>Parameter</b>	Description	Options
Spread	When the system clock generator pulses,	[Enabled], [Disabled]
Spectrum	the extreme values of the pulse generate	
	excess EMI. Enabling pulse spectrum	
	spread modulation changes the extreme	
	values from spikes to flat curves, thus	
	reducing EMI. This benefit may in some	
	case be outweighed by problems with	
	timing-critical devices, such as a	
	clock-sensitive SCSI device.	
HT Spread	Enables or Disables HT Spread Spectrum.	[Enabled], [Disabled]
Spectrum	HT is Hyper Transport between CPU and	
	North Bridge.	
SSE/SSE2	This feature controls the availability of the	[Enabled], [Disabled]
Instructions	processor's SSE and SSE2 instruction sets.	
	When enabled, the processor's SSE and	
	SSE2 instruction sets are enabled. Software	
	applications can make use of those	
	instructions to better process large	
	amounts of data quickly.	
	When disabled, the processor's SSE and	
	SSE2 instruction sets are disabled.	
	Software applications will not be able to use	
	those instructions to process multiple data	
	elements simultaneously. However, the	
	processor's MMX instruction set will still	
	be available for use. It is highly	
	recommended that you leave this BIOS	
	feature at the default setting.	

### Integrated Peripherals

CMOS Setup Utiliyt – Copyright (c) 1985-2008,American Megatrends, Inc. Integrated Peripherals			
IDE Function Setup	[Press Enter]	Item Help	
▶ Onboard Device Setup ▶ Onboard I/O Chip Setup	[Press Enter] [Press Enter]	Menu Level ▶	
↑↓←→: Move ENTER: Select   F5: Previous		F10: Save ESC: Exit F1: General Help F7: Optimized Defaults	

The following table describes the parameters found in this menu. \\

<b>Parameter</b>	Description	Options
IDE Function Setup	This page allows you to setup IDE	[Press Enter]
	function	
Onboard Device	This page allows you to setup	[Press Enter]
Setup	onboard devices.	
Onboard I/O Chip	This page allows you to setup	[Press Enter]
Setup	onboard I/O chip.	

# Integrated Peripherals-IDE Function Setup

CMOS Setup Utiliyt – Copyright (c) 1985-2008,American Megatrends, Inc. IDE Function Setup				
OnChip IDE Channe	10	[Enabled]		Item Help
Primary Master	PIO	[Auto]		
Primary Slave	PIO	[Auto]		
Primary Master	UDMA	[Auto]		Menu Level ▶
Primary Slave	UDMA	[Auto]		
OnChip IDE Channe	11	[Enabled]		
Primary Master	PIO	[Auto]		
Primary Slave	PIO	[Auto]		
Primary Master	UDMA	[Auto]		
Primary Slave	UDMA	[Auto]		
IDE DMA Transfer Access		[Enabled]		
SATA 1		[Enabled]		
SATA 2		[Enabled]		
IDE Prefetch Mode		[Enabled]		
IDE HDD Block Mode	е	[Enabled]		
SATA Port Speed Se	ttings	[Auto]		
↑↓←→: Move ENTER:	Select Ite	m +/-/PU/PD: Value	F10: S	Save ESC: Exit F1: General Help
F5: F	Previous V	/alues	F7: Op	ptimized Defaults

The following table describes the parameters found in this menu.

Parameter	Description	Options
IDE	The four IDE PIO fields let you set a PIO mode (0-4)	
Primary/Second	for each of the four IDE devices that the onboard IDE	
ary	interface supports. Modes 0 through 4 provide	
Master/Slave	increased performance. In Auto mode, the system	
PIO	automatically determines the best mode for each	
	device.	
On-Chip IDE	The Chipset contains a PCI IDE interface with support	[Enabled],
First/Second	for two IDE channels. Select Enabled to activate the	[Disabled]
Channel	first and/or second IDE interface. Select Disabled to	
	deactivate an interface, if you install a primary and/or	
	secondary add-in IDE interface.	
IDE	UDMA (Ultra DMA) is a DMA data transfer protocol	
Primary/Second	that utilized ATA transfer protocol that utilizes ATA	
ary	commands and the ATA bus to allow DMA commands	
Master/Slave	to transfer data ata maximum burst rate of 33 MB/s.	
UDMA	When you select Auto in the four IDE UDMA fields (for	
	each of up to four IDE devices that the internal PCI IDE	
	interface supports), the system automatically	
	determines the optimal data transfer rate for each IDE	
	device.	
IDE DMA	This category allows you to enable or disable DMA	[Enabled],
Transfer Access	transfer access of IDE device (or IDE HDD)	[Disabled]
SATA 1/2	Enable/Disable Serial-ATA 1 or Serial-ATA-2. SATA 1	
	control port 1 and 3, SATA 2 control port 2 and 4.	
IDE Prefetch	The onboard IDE drive interfaces supports IDE	
Mode	prefetching, for faster drive accesses. If you install a	
	primary and/or secondary add-in IDE interface, set this	
	field to Disabled if the interface does not support	
	prefetching.	

Parameter	Description	Options
IDE HDD Block	Block mode is also called block transfer, multiple	[Enabled],
Mode	commands, or multiple sectors read/write. If your IDE	[Disabled]
	hard drive supports block mode(most new drives do),	
	select Enabled for automatic detection of the optimal	
	number of block read/write per sector the drive can	
	support.	
SATA PORT	This category allows you to determine the speed of	[Auto],
Speed Settings	SATA port.	

## Integrated Peripherals-Onboard Device Setup

	P. ( ) ( ) ( )	
OnChip USB	[V1.1+V2.0]	Item Help
USB Memory Type	[SHADOW]	Menu Level ▶
USB KB Legacy Support	[Enabled]	
USB Mouse Legacy Support	[Enabled]	
ALC888S Audio	[Auto]	
MAC Lan	[Auto]	
MAC Lan Boot ROM	[Disabled]	

The following table describes the parameters found in this menu.

Parameter	Description	Options
On Chip USB	This field allows you to determine on	[V1.1+V2.0], [V1.1]
	chip USB type or disable on chip USB.	
UDB Memory Type	Use this item to change the type of	[Shadow], [Base
	USB memory to shadow or Base	Memory]
	memory.	
USB KB Legacy	This field enables or disables USB	[Enabled], [Disabled]
Support	keyboard support function.	
USB Mouse	This field enables or disables USB	[Enabled], [Disabled]
Support	mouse support function.	
ALC888S Audio	Change the on board Audio to auto or	[Auto], [Disable]
	disabled	
MAC LAN	Enables or disables onboard LAN	[Enabled], [Disabled]
	controller, If you wish to use the	
	motherboard's onboard LAN	
	controller, you should certainly enable	
	this BIOS feature.	
	You can disable this feature if you do	
	not want to use the motherboard's	
	onboard LAN controller. This may free	
	up an IRQ for other devices to use.	
	This is useful if your motherboard	
	does not support APIC and have many	
	devices that can not share IR Qs.	
MAC LAN Boot	Enables or disables on board LAN	[Enabled], [Disabled]
ROM	boot ROM.	

## Integrated Peripherals - Onboard I/O Chip Setup

Onboard I/O Chip Setup			
Onboard FDC Controller	[Enabled]	Item Help	
Onboard Serial Port 1	[3F8/IRQ4]	Menu Level ▶	
UART Mode Select	[IrDA]		
UR2 Duplex Mode	[Halt]		
Onboard Parallel Port	[378/IRQ7]		
Parallel Port Mode	[SPP]		
ECP Mode Use DMA	[3]		
↑↓←→: Move ENTER: Select	Item +/-/PU/PD: Value	F10: Save ESC: Exit F1: General Help	
F5: Previous	s Values	F7: Optimized Defaults	

The following table describes the parameters found in this menu.

<b>Parameter</b>	Description	Options
Onboard FDC	Select Enabled if your system has a floppy	[Enabled]. [Disabled]
Controller	disk controller (FDC) installed on the system	
	board and you wish to use it. If you install an	
	add-in FDC or the system has no floppy	
	drive, select Disabled in this field.	
Onboard	Select a logical COM port name and	
Serial Port 1	matching address for the serial port. Select	
	an address and corresponding interrupt for	
	the serial port.	
UR2 Duplex	In an infrared port mode, this field appears.	
Mode	Full-duplex mode permits simultaneous	
	tow-direction transmission. Half-duplex	
	mode permits transmission in one direction	
	only at a time. Select the value required by	
	the IR device connected to the IR port.	
Onboard	Select a logical LPI port address and	[xxx+IRQx]
Parallel Port	corresponding interrupt for the physical	
	parallel port.	
Parallel Port	Select an operating mode for the onboard	[Normal], [EPP],
Mode	parallel (printer) port.	[EPP], [EPP+ECP]
ECP Mode	This item allows users to manually set the	
used DMA	DMA channel for ECP mode	

### Power Management

The Power Management menu lets you configure your system to most effectively save energy while operating in a manner consistent with your own style of computer use. The following screen shows the Power Management parameters and their default settings:

CMOS Setup Utiliyt – Copyright (c) 1985-2008,American Megatrends, Inc. Power Management Setup			
ACPI Function	[Enabled]	Item Help	
ACPI Suspend Type	[S3(STR)]		
Video off Method	[DPMS Support]		
HDD Power Down	[Disabled]	Menu Level ▶	
HDD Down In Suspend	[Disabled]		
Soft-Off by PWR-BTTN	[Delay 4 Sec]		
WOL (PME#) From Soft-Off	[Disabled]		
X WOR (R1#) From Soft-Off	Disabled		
USB Resume from S1/S3	[Disabled]		
Resume by Alarm	[Disabled]		
X Date of Month Alarm	0		
X Time(hh:mm:ss) Alarm	00:00:0		
POWER ON function	[BUTTON ONLY]		
PWRON After PWR-Fail	[Former-Sts]		
↑↓←→: Move ENTER: Select Ite	em +/-/PU/PD: Value	F10: Save ESC: Exit F1: General Help	
F5: Previous \	/alues	F7: Optimized Defaults	

The following table describes the parameters found in this menu.

Parameter	Description	Options
ACPI Function	This item allows you to enable or disable	[Enabled], [Disabled]
	the ACPI function	
ACPI Suspend	This item specifies the power saving modes	[S1 (POS)]: Set ACPI
Type	for ACPI function. S1 (POSP: The S1 sleep	suspend
	mode is a low power state In this state, no	type to
	system context (SPU or chipset) is lost and	S1/POS
	hardware maintains all system context/ S3	(Power On
	(STR): The S3 sleep mode is s power-down	Suspend).
	state in which power is supplied only to	[S3 (STR)]: Set ACPI
	essential components such as main	suspend
	memory and wake-capable devices and all	type to
	system context is saved to main memory.	S3/STR
	The information stored in memory will be	
	used to restore the PC to the previous state	
	when an wake-up event occurs.	
HDD Power	The setting controls how long a hard disk	[Disabled], [Standby],
Down	drive must be left idle before it spins	[Suspend]
	downs.	
HDD Down In	Enables or Disables the functionality of	[Enabled], [Disabled]
Suspend	HDD down in suspend	

<b>Parameter</b>	Description	Options
Soft-off by	When Enabled, turning the	[Instant-off]: Press down button
PWR/BTTN	system off with the on/off	then power off instantly
	button places the system in a	[Delay 4 Sec.]: Press Power button 3
	very low-power-usage state,	sec. to power off. Enter
	with only enough circuitry	suspend if button is
	receiving power to detect power	pressed less than 4 sec.
	button activity or Resume by	
	Ring activity.	
WOL	This category enables or	[Enabled], [Disabled]
(PME#)	disables wake-on-Lan from	
From	soft-off	
Soft-Off		
Resume by	You can set "Resume by Alarm"	[Disabled]
Alarm	item to enabled and key in	[Enabled]: Enable alarm function to
	Date/Time to power on system.	Power On system. If
		RTC Alarm Lead to
		Power On is Enabled,
		Date( of Month) Alarm:
		Everyday, 1~31
		Time(hh:mm:ss) Alarm:
		(0.~23):(0-59):(0~59)
POWER ON	Select the method to power on	[Button Only], [Keyboard 98], [Hot
Function	the system	Key], [Mouse Left], [Mouse Right]
POWER	This field allows you to	[FORMER-Sts], [On], [Off]
After	determine the power status to	
PWR-Fail	on/off or former-sts after the	
	system	

### PCI/PnP Setup

CMOS Setup Utiliyt – Copyright (c) 1985-2008,American Megatrends, Inc. PnP/PCI Configuration				
Init Display First	[PCIEx]	Item Help		
Reset Configuration Data	[Disabled]			
Resources Controlled By	[Auto(ESCD0)]	Menu Level ▶		
X IRQ Resources	Press Enter			
PCI/VGA Palette Snoop	[Disabled]			
** PCI Express relative items*	•			
Maximum Payload Size	[4096]			
↑↓←→: Move ENTER: Select Ite	em +/-/PU/PD: Value F	10: Save ESC: Exit F1: General Help		
F5: Previous \	7: Optimized Defaults			

The following table describes the parameters found in this menu.

<b>Parameter</b>	Description	Options
Init Display	Initialize the AGP video display before initializing	
First	any other display device on the system. Thus the	
	AGP display becomes the primary display.	
Reset	Normally, you leave this field Disabled. Select	[Enabled],
Configuration	Enabled to reset Extended System Configuration	[Disabled]
Data	Data (ESCD) when you exit Setup if you have	
	installed a new add-on and the system	
	reconfiguration has caused such a serious conflict	
	that the operating system cannot boot	
Resources	This item allows user to assign PnP resource (I/O	[Auto]
Controlled By	address, IRQ&DMA channels) for Plug and Play	[Manual]
	compatible devices automatically or manually	
IRQ Resources	When resource are controlled by manually, assign	[Press Enter]
	each system interrupt a type , depending on the type	
	of device using the interrupt.	
	Option:	
	[PCI Device]: Assign this IRQ for PCI device.	
	[Reserved]: Reserve this IRQ for other device.	
PCI/VGA	This option is only very rarely needed. It should be	[Disabled],
Palette Snoop	left at "Disabled" unless a video device specifically	[Enabled]
	requires the setting enabled upon installation.	
Maximum	This field displays maximum payload size of the	[128-4096]
Payload Size	system	
PCI 1/2 IRQ	This item allows user to assign PCI IRQ for device	[Auto], [3],
Assignment		[4], [5], [6],
		[7], [10] ,
		[11] , [12] ,
		[14] , [15]

### PC Health Status

CMOS Setup Utiliyt – Copyright (c) 1985-2008,American Megatrends, Inc. PC Health Status				
CPU Vcore	1.248V	Item Help		
+3.3V	3.273V			
+5V	5.086V			
+12V	11.960V	Menu Level ▶		
+5USB	5.059V			
Voltage Battery	3.024V			
Current CPU Temperature	51°C/123°F			
Current SYSTEM Temperatur	e 61°C/141°F			
CPU FAN Speed	3648 RPM			
System FAN Speed	2170 RPM			
↑↓←→: Move ENTER: Select Ite	em +/-/PU/PD: Value	F10: Save ESC: Exit F1: General Help		
F5: Previous \	F5: Previous Values F7: Optimized Defaults			

The following table describes the parameters found in this menu:

rameter	Description	Options
V core	Detect system's voltage status	
	automatically	
CPU Temperature	Detect CPU Temperature automatically	
CPU/SYSTEM FAN	Detect CPU/SYSTEM Fan Speed Status	
Speed (RPM)	automatically	
CPU Smart FAN	The item displays the system Smart Fan	
Control	Function status. It is always enabled by	
	system.	

### Frequency/Voltage Control

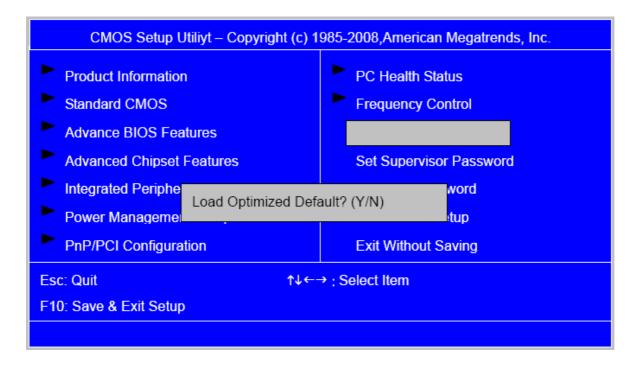
CMOS Setup Utility - Copyright (C) 1985-2005,American Megatrends,Inc. Frequency/Voltage Control				
Manufacturer: Intel Ratio Status: Unlocked (Min:06,Max:10) Ratio Actual Value: 10 CPU Frequency : 266MHz Auto Detect DIMM/PCI CLK Enabled Spread Spectrum Enabled	Help Item Options Disabled Enabled			
↑↓←→ :Move Enter: Select +/-/:Value F10:Save F1:General Help F9:Optimized Defa				

The following table describes the parameters found in this menu:

<b>Parameter</b>	Description	Optio
		ns
Auto Detect	This option allows you to enable/disable the feature of	Enabled
DIMM/PCI CLK	auto detecting the clock frequency of the installed PCI	Disabled
	bus.	
Manufacturer	This item specifies CPU Manufacturer	Intel
CPU frequency	This item specifies CPU frequency	266MHz
Spread	When the motherboard's clock generator pulses, the	Enabled
Spectrum	extreme values (spikes) of the pulses create EMI	
	(Electromagnetic Interference). The spread Spectrum	
	function reduces the EMI generated by modulating	
	the pulses so that the spikes of the pulses are reduced	
	to flatter curves. If you do not have any EMI problem,	
	leave the setting at Disabled for optimal system	
	stability and performance. But if you are plagued by	
	EMI, setting to Enabled for EMI reduction.	
	Remember to disable Spread Spectrum if you are	
	overlooking because even a slight jitter can introduce	
	a temporary boost in clock speed which may just	
	cause your over lock ed processor to lock up.	

### **Load Default Settings**

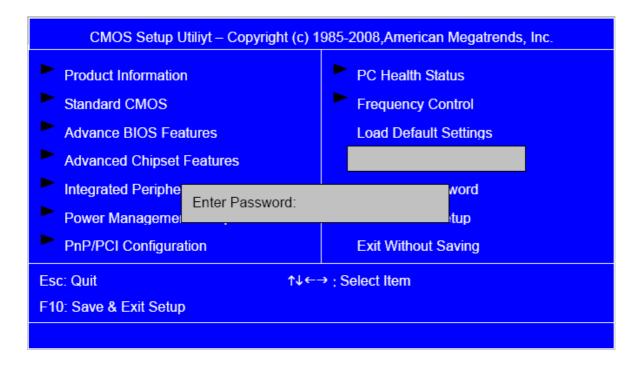
This option opens a dialog box that lets you install defaults for all appropriate items in the Setup Utility.



<b>Parameter</b>	Description	<b>Options</b>
Load Default	Select the field loads the factory defaults for BIOS and	
Settings	Chipset Features, which the system automatically	
	detects. This option opens a dialog box that lets you	
	install optimized defaults for all appropriate items in the	
	Setup Utility.	

### Set Supervisor/User Password

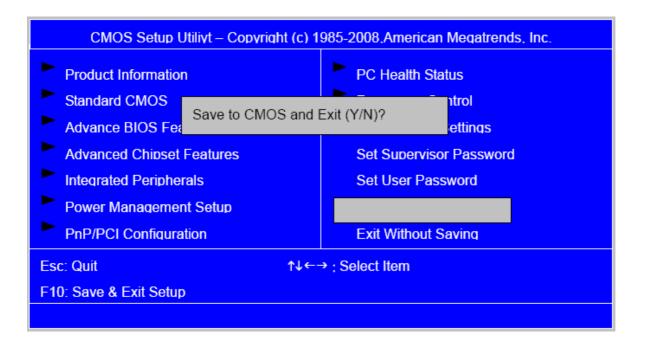
When this function is selected, the following message appears at the center of the screen to assist you in creating a password.



Parameter	Description	<b>Options</b>
Set	When this function is selected, the following message	
Supervisor/User	appears at the center of the screen to assist you in	
Password	creating a password.	
	ENTER PASSWORD	
	Type the password, up to eight characters, and	
	press <enter>. The password typed now will clear any</enter>	
	previously entered password from CMOS Memory. You	
	will be asked to confirm the password. Type the password	
	again and press <enter>. You may also press<esc> to</esc></enter>	
	abort the selection.	
	PASSWORD DISABLED	
	To disable password, just press <enter> when you are</enter>	
	prompted to enter password with empty. A message will	
	confirm the password being disabled.	
	If you have selected "System" in "Security Option" of	
	"BIOS Feature Setup" menu, you will be prompted for the	
	password every time the system reboots or any time you	
	try to enter BIOS Setup. If you have selected "Setup" at	
	"Security Option" from "BIOS Features Setup" menu, you	
	will be prompted for the password only when you enter	
	BIOS Setup.	
	Supervisor Password has higher priority than User	
	Password. You can use Supervisor Password when	
	booting the system or entering BIOS Setup to modify all	
	settings.	

### Save & Exit Setup

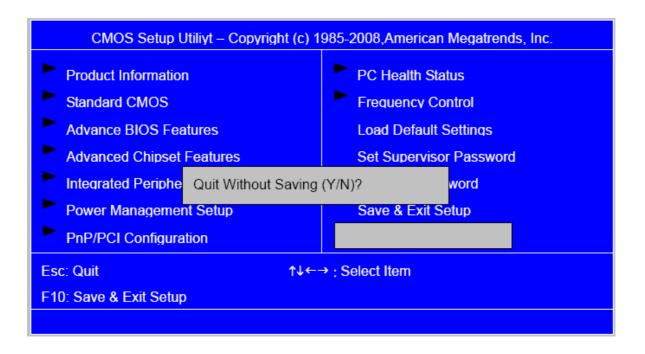
Highlight this item and press <Enter> to save the changes that you have made in the Setup Utility and exit the Setup Utility.



Parameter	Description	<b>Options</b>
Save & Exit Setup	Press <enter> to save the changes that have made</enter>	
	in the Setup Utility and exit the Setup Utility.	
	Press <y> to save and Exit or <n> to return to the</n></y>	
	main menu.	

### Exit Without Saving

Highlight this item and press <Enter> to discard any changes that you have made in the Setup Utility and exit the Setup Utility.



Parameter	Description	Options
Exit Without Saving	Press <enter> to discard any changes and</enter>	
	exit the Setup Utility	

### Machine Disassembly and Replacement

To disassemble the computer, you need the following tools:

Wrist grounding strap and conductive mat for preventing electrostatic discharge.

Wire cutter.

Phillips screwdriver (may require different size).

**NOTE:** The screws for the different components vary in size. During the disassembly process, group the screws with the corresponding components to avoid mismatches when putting back the components.

### **General Information**

### Before You Begin

Before proceeding with the disassembly procedure, make sure that you do the following:

- 1. Turn off the power to the system and all peripherals.
- 2. Unplug the AC adapter and all power and signal cables from the system

### **Disassembly Procedure**

This section tells you how to disassemble the system when you need to perform system service. Please also refer to the disassembly video, if available.

**CAUTION:** Before you proceed, make sure you have turned off the system and all peripherals connected to it.

### Aspire M5200/3200/1200 Standard Disassembly Process

#### Bezel Label

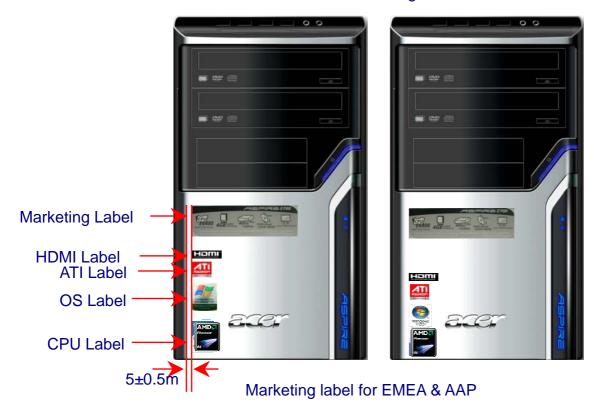
#### **Process:**

1. According to the requirement, paste ATI, OS, CPU, HDMI and marketing label by SKU.

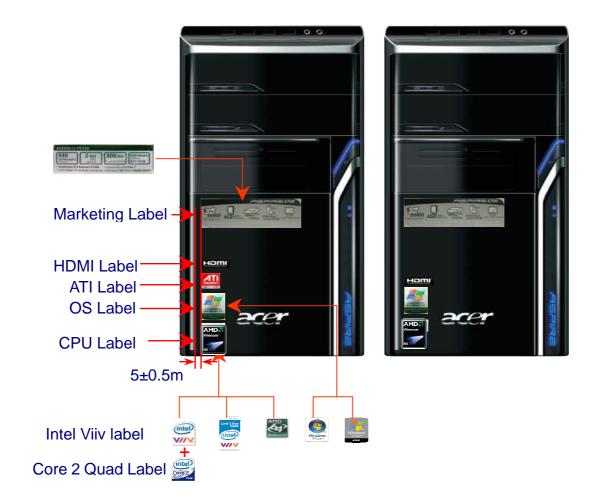
**Aspire M3200** 



Marketing label for AAC



### Aspire M5200



### **Aspire M1200**



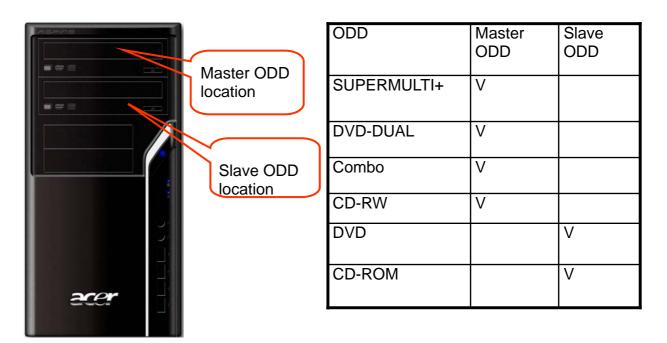




### **ODD** install place

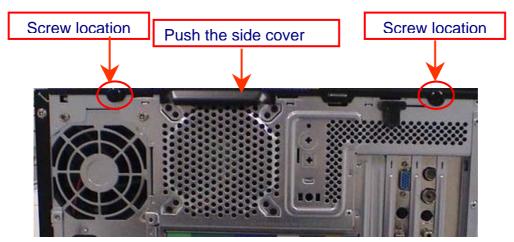
#### **Notice:**

I. Dual ODD assembly rule.



#### Remove side cover

- 1. Put the Computer on the worktable lightly.
- 2. Release left side cover with 2 screws then remove left side cover.



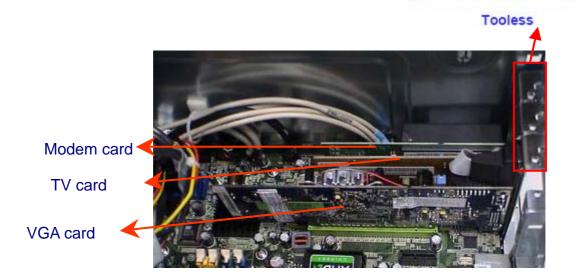
#### Remove Cards

#### **Process:**

1. Release the slot cover tooless

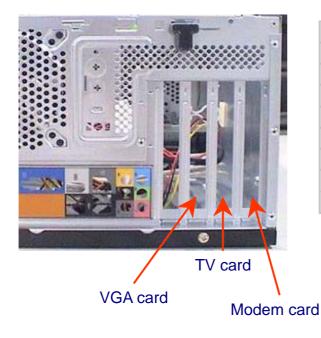
2. Remove VGA , TV, Modem Card, the following list is for your reference about the

mutual location relation (Optional by SKU).



#### **Notice:**

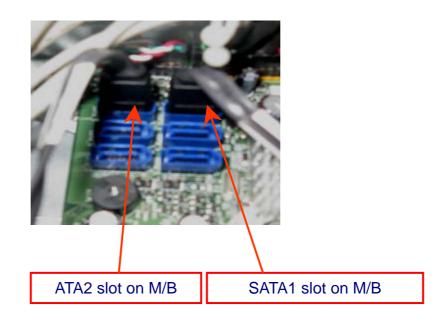
I. Remove card, don't touch any electric parts on PCB.

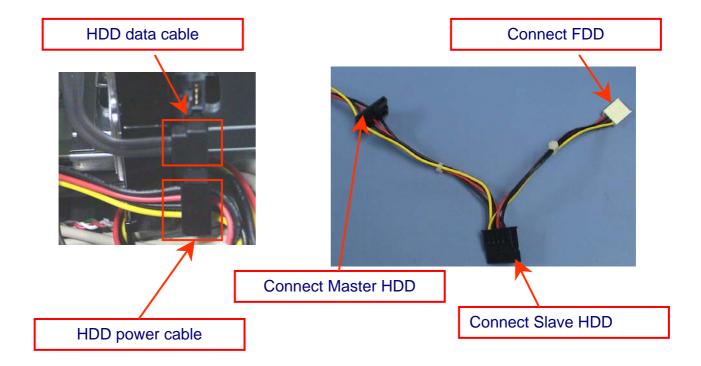


Slot 1	Slot 2
TV Card	N
N	Modem Card
1394 Card	N
Lan Card	N
TV Card	Modem Card
TV Card	1394/Lan Card
1394 /Lan card	Modem Card
Lan Card	1394 Card

#### Remove HDD Data Cables

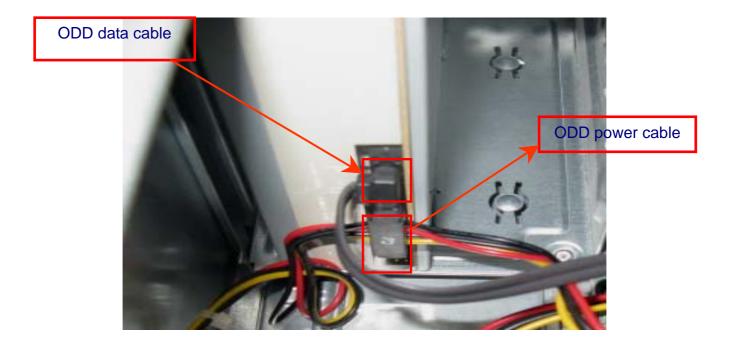
- 1. Remove HDD/ODD data cable from M/B.
- 2. Remove master HDD data & power cable.





#### Remove ODD DATA cable

- 1. Remove master ODD data and power cable from ODD.
- 2. Remove slave ODD data and power cable from master and Slave ODD (Optional by  $\mbox{SKU})$

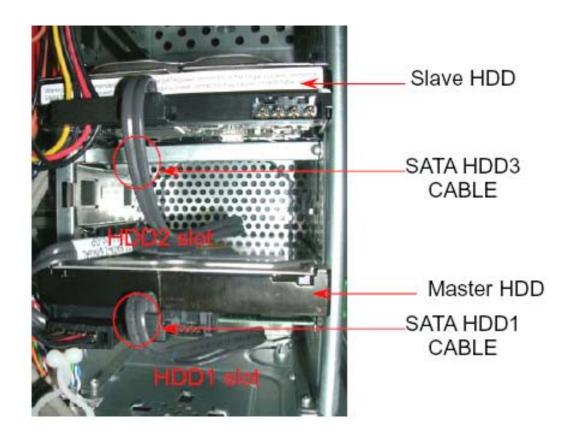


Port Num	SATA1	SATA2	SATA3	SATA4
1HDD	V			
2HDDs	٧		V	
10DD		V		
20DDs		V		V

#### Cable routing

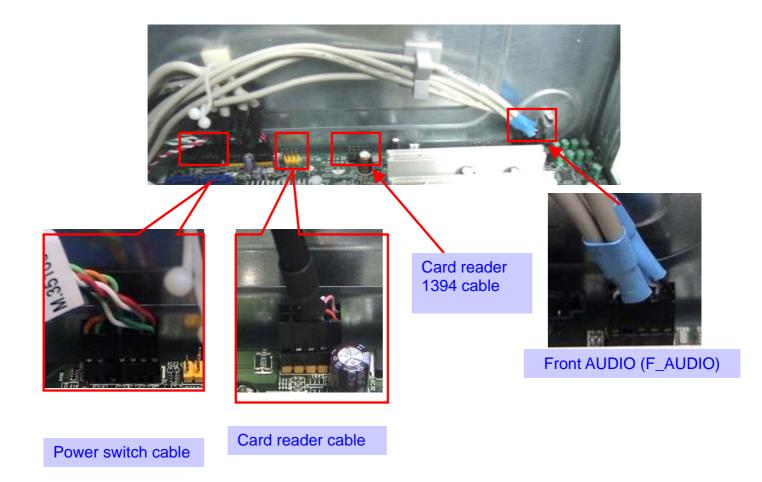
#### **Process:**

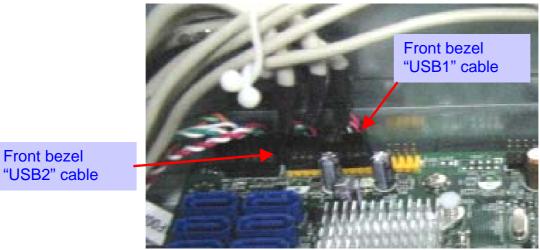
1. Put master HDD Cable into HDD1 slot, And Put Slave HDD Cable into HDD2 slot



#### Remove Cables

- 1. Remove power switch cable from M/B.
- 2. Remove Audio cable from M/B "F-AUDIO" •
- 3. Remove card reader cable from M/B "USB2"
- 4. Remove USB1 cable from M/B "F\_USB3"
- 5. Remove USB cable from M/B "F\_USB4"





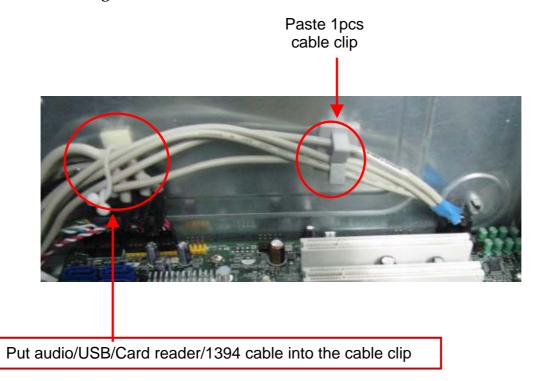
### Notice:

I. Front panel USB cable must be always connect to M/B USB2 and USB3 port whether has card reader.

### Paste clip/Cable routing

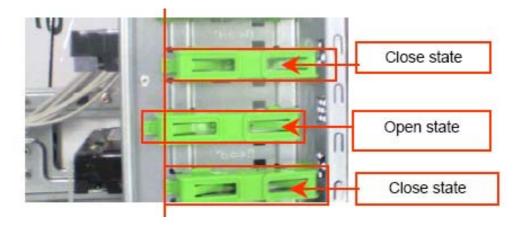
#### Process:

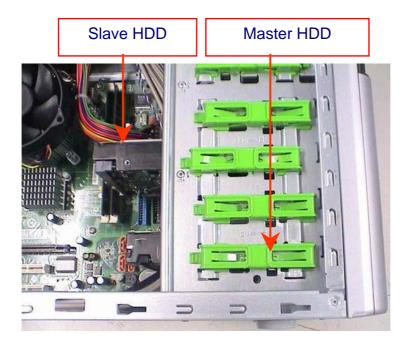
- 1. We should paste a cable clip on bottom, Put audio cable into the cable clip
- 2. Cable routing.



#### Remove HDD

- 1. Remove Master HDD from the first HDD location.
- 3. Remove Slave HDD from the second HDD location. (Optional by SKU)

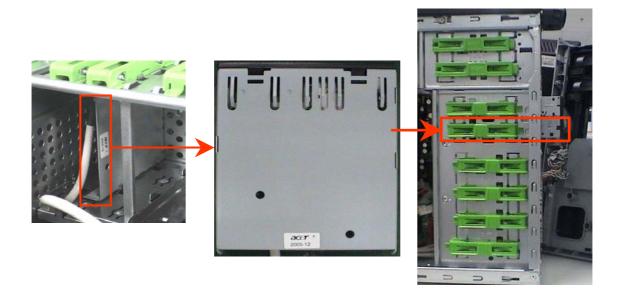




#### Remove card reader

#### **Process:**

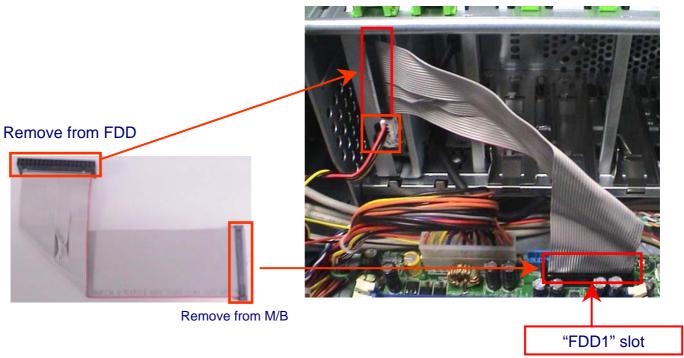
1. Remove card reader from chassis.



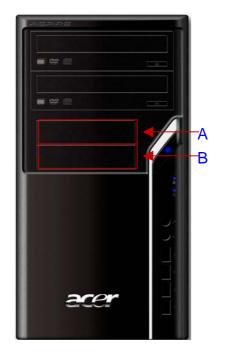
#### Remove FDD Cable

#### **Process:**

- 1. Remove FDD digital cable just as pictures (Optional by SKU).
- 2. Plug 4 pins power cord from FDD slot.



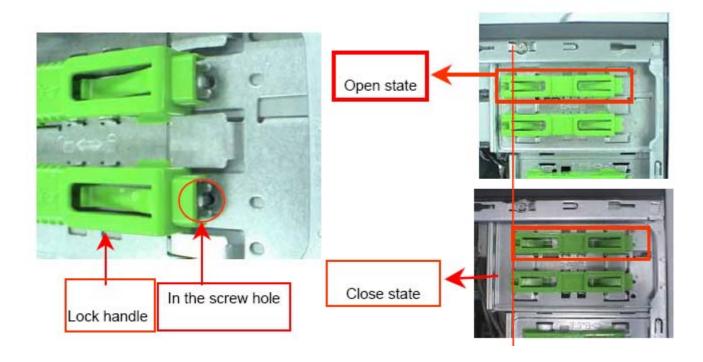
#### **Notice:**

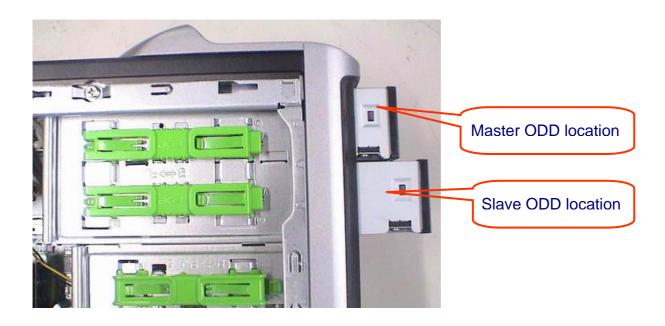


	A	В
Only card reader	Card reader	
Only FDD	FDD	
Card reader and FDD	FDD	Card reader

#### Remove ODD

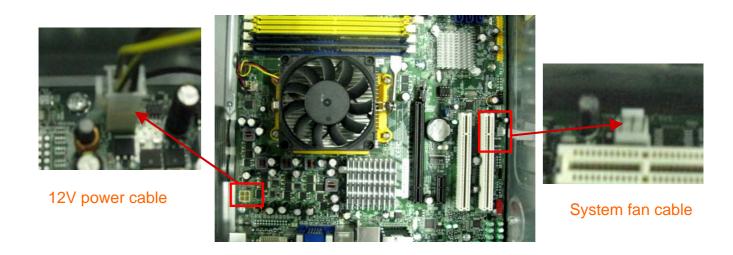
- 1. Push the lock handle release ODD.
- 2. Remove Master ODD from the location.
- 3. Remove slave ODD from the location. (Optional by SKU)

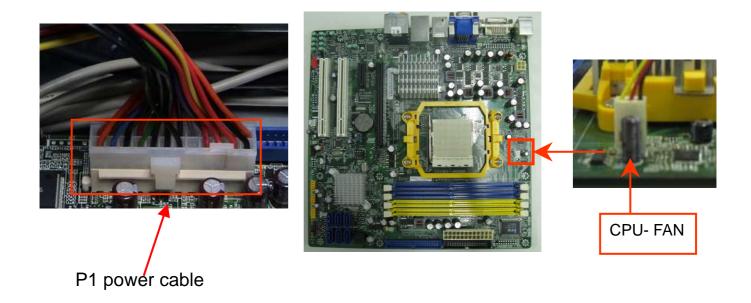




#### Remove Cables

- 1. Remove 12V power cable from M/B connector "PWR2".
- 2. Remove System fan cable from M/B connector "SYS FAN".
- 3. Remove P1 power cable from M/B connector "PWR".
- 4. Remove heat sink cable from M/B connector "CPU\_ FAN" .



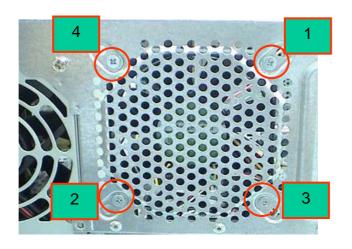


# Remove System FAN

### **Process:**

- 1. Release four screws according to the following picture.
- 2. Remove Sys FAN (Optional by SKU)

### Release four screws.



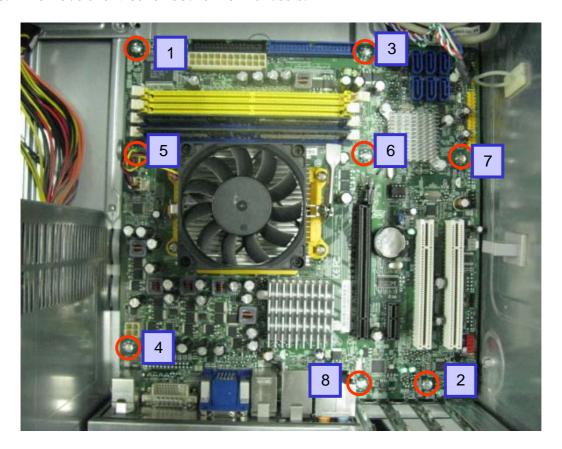
The direction of System FAN

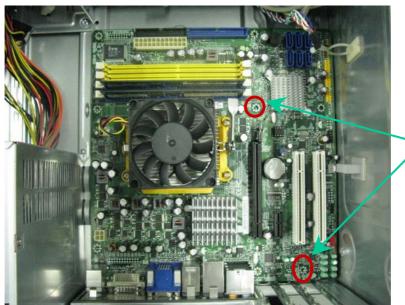


## Remove mother board

### **Process:**

- 1. Release 8PCS screws form the corresponding hole.
- $2. \ \ Release \ screws \ according \ to \ the \ following \ picture \ in \ turn.$
- 3. Remove the Mother board from chassis.



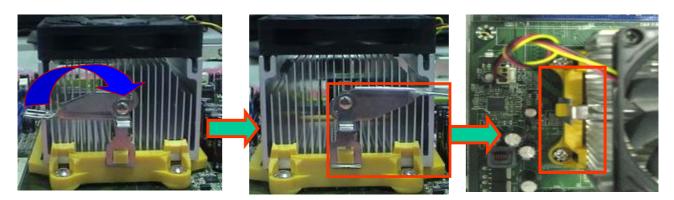


Raised platform

### Remove CPU cooler

#### **Process:**

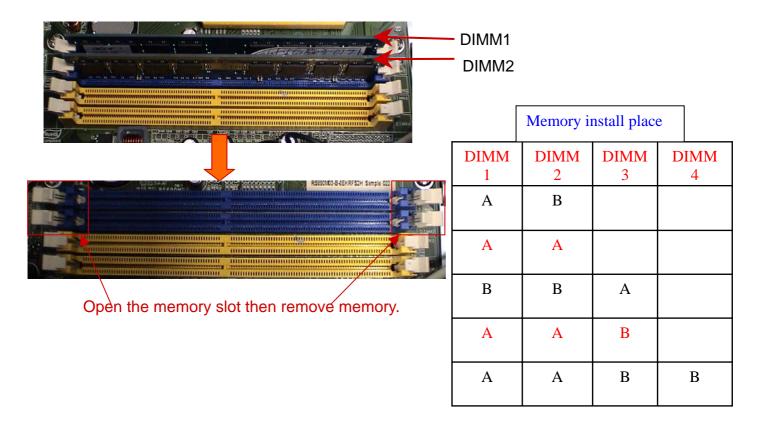
1. Release the clip and remove Cooler from the Retention module.



### Remove memory

#### **Process:**

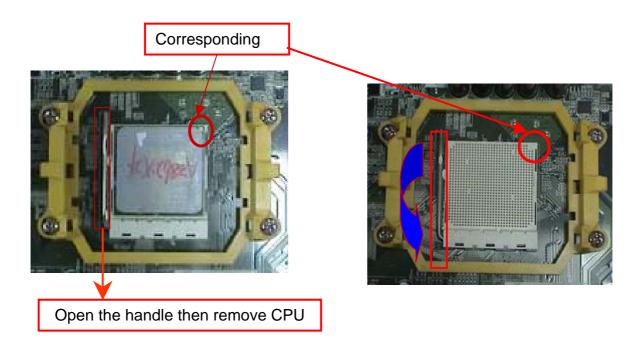
- 1. Open the memory slot then remove memory.
- 2. Remove the first Memory from DIMM1 slot.
- $3. \quad Remove \ the \ second \ Memory \ from \ DIMM2 \ slot \ (Optional \ by \ SKU).$



### Remove CPU

### **Process:**

1. Remove CPU according following the pictures.



# Remove I/O shielding

### **Process:**

1. Remove I/O Shielding.



# **Troubleshooting**

Please refer to generic troubleshooting guide for troubleshooting information relating to following topics:

- □ Power-On Self-Test (POST)
- □ POST Check Points
- □ POST Error Messages List
- □ Error Symptoms List

# Jumper and Connector Information

### Jumper Setting

This section explains how to set jumpers for correct configuration of the mainboard.

#### Setting Jumper

Use the motherboard jumpers to set system configuration options. Jumpers with more than one pin are numbered. When setting the jumpers, ensure that the jumper caps are placed on the correct pins.

Description	Illustration
The illustrations show a 2-pin jumper. When the jumper cap is placed on both pins, the jumper is SHORT. If you remove the jumper cap, or place the jumper cap on just one pin, the jumper is OPEN.	SHORT OPEN
This illustration shows a 3-pin jumper. Pins 1 and 2 are SHORT	

#### Clear CMOS

Jumper	Туре	Description	Setting(Default)	Illustration
CLR_CMOS	3-pin		1-2 : Clear 2-3 : Normal Before clearing the CMOS,make sure to turn off the system	Clear CMOS

# **Checking Connector**

CPU\_FAN: CPU Cooling Fan Connector

	Pin	Signal Name	Function
	1	GND	System Ground
	2	+12V	Power +12V
<b>│                                    </b>	3	Sense	Sensor
3 040	4	Control	FAN Control Signal

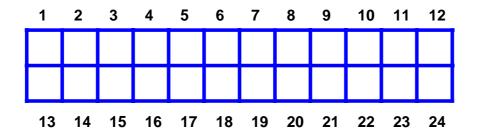
### SYS\_FAN/PWR\_FAN: FAN Power Connectors

	Pin	Signal Name	Function
	1	GND	System Ground
	2	+12V	Power +12V
□ 1 ○ 2 ○ 3○ .	3	Sense	Sensor

### ATX12V: ATX 12V Power Connector

Pin	Signal Name
1	Ground
2	Ground
3	+12V
4	+12V

## ATX\_POWER: ATX 24-pin Power Connector



Pin	Signal Name	Pin	Signal Name
1	+3.3	13	+3.3V
2	+3.3	14	-12V
3	COM	15	COM
4	+5V	16	PS_ON
5	COM	17	COM
6	+5V	18	COM
7	COM	19	COM
8	PWR OK	20	-5V
9	5VSB	21	+5V
10	+12V	22	+5V
11	+12V	23	+5V
12	+3.3V	24	COM

### Front Panel Header

The front panel header (PANEL1) provides a standard set of switch and LED connectors commonly found on ATX or Micro ATX cases. Refer to the table below for information:

Illustration	Pin	Signal	Pin	Signal
1	1	5V_SYS	2	GPIO_GRN_ HDR_R
	3	HDD_LED_R	4	GPIO_YLW_ HDR_R
0 0	5	GND	6	PSIN
80	7	ICH_SYS_RS TJ	8	GND
13 🔾 🔾 14	9	5V_SYS	10	KEY
	11	NC	12	5V_SB
	13	NC	14	LAN_ACTJ

#### Front USB

Illustration	Pin	Signal	Function	Pin	Signal	Function
1	1	VREG_FP_U SBPWR0	Front panel USB power(Ports 0,1)	2	VREG_FP_U SBPWR0	Front panel USB power(Ports 0,1)
	3	USB_FP_P0-	Front panel USB Port 0 Negative Signal	4	USB_FP_P1-	Front panel USB Port 1 Negative Signal
	5	USB_FP_P0+	Front panel USB Port 0 Positive Signal	6	USB_FP_P1+	Front panel USB Port 1 Positive Signal
	7	GROUND		8	GROUND	
	9	KEY		10	GROUND	

#### Front Audio

Illustration	Pin	Signal Name	Pin	Signal Name
	1	MIC2-L	2	AUD_GND
1 0 2	3	MIC2-R	4	AUD_PRESENCE_L
	5	LINE2-R	6	MIC2-JD
	7	FRONT-IO-SENSE	8	KEY
9 0 0 10	9	LINE2-L	10	LINE2-JD

### Front 1394

Illustration	Pin	Signal Name	Pin	Signal Name
	1	TPA+	2	TPA-
	3	GROUND	4	GROUND
	5	TPB+	6	TPB-
	7	+12V(FUSED)	8	+12V(FUSED)
9 0 10	9	KEY	10	GROUND

### Aux\_In

Illustration	Pin	Signal Name	Pin	Signal Name
	1	CD_IN_L	2	GROUND
	3	GROUND	4	CD_IN_R
	5	KEY		
5 G 3				
C 4				

## Intruder

	Pin	Signal Name	Pin	Signal Name
İ	1	INTRUDERJ	2	GROUND

# ${\it J_3} ({ m for requested})$

Pin	Signal Name	Pin	Signal Name
1	AGPIO1	2	GROUND

# ${\it J4} ({ m for\ requested})$

Pin	Signal Name	Pin	Signal Name
1	AGPIO2	2	GROUND

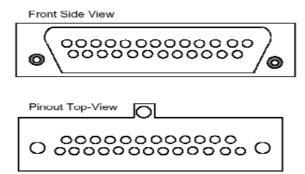
### $SPDIF\_OUT$

Illustration	Pin	Signal Name	Pin	Signal Name
	1	5V_SYS	2	KEY
	3	SPDIF_OUT	4	GND
0 4				

### IRDA(Reserved)

Illustration	Pin	Signal Name	Pin	Signal Name
	1	5V_SB	2	IR_26
	3	SIO_RSMRSTJ	4	RESETCONJ
	5	IR_20	6	IR_27
	7	IR_RE	8	IR_21
9 0 10	9	GND	10	KEY

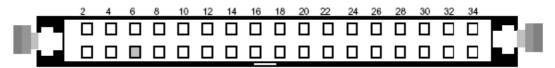
#### LPT



Pin	Signal Name	Pin	Signal Name
1	STROBE	14	ALF
2	PD0	15	ERROR
3	PD1	16	INIT
4	PD2	17	SLCTIN
5	PD3	18	GROUND
6	PD4	19	GROUND
7	PD5	20	GROUND
8	PD6	21	GROUND
9	PD7	22	GROUND
10	ACK	23	GROUND
11	BUSY	24	GROUND
12	PE	25	GROUND
13	SLCT		

### FDD

## (Top-View)

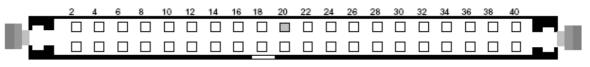


1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33

Pin	Signal Name	Pin	Signal Name
1	Ground	2	DRVDEN0
3	Ground	4	HDL-
5	Keypin	6	DS3-
7	Ground	8	INDEX-
9	Ground	10	MTR0-
11	Ground	12	DS0-
13	Ground	14	DS1-
15	Ground	16	MTR1-
17	Ground	18	DIR-
19	Ground	20	STEP-
21	Ground	22	WDATA
23	Ground	24	WGATE-
25	Ground	26	TRK0-
27	Ground	28	WP-
29	Ground	30	RDATA
31	Ground	32	HDSEL-
33	Ground	34	DSKCHG-

#### IDE1

### (Top-View)



1 3 5 7 9 11 13 15 17 19 21 23 25 27 29 31 33 35 37 39

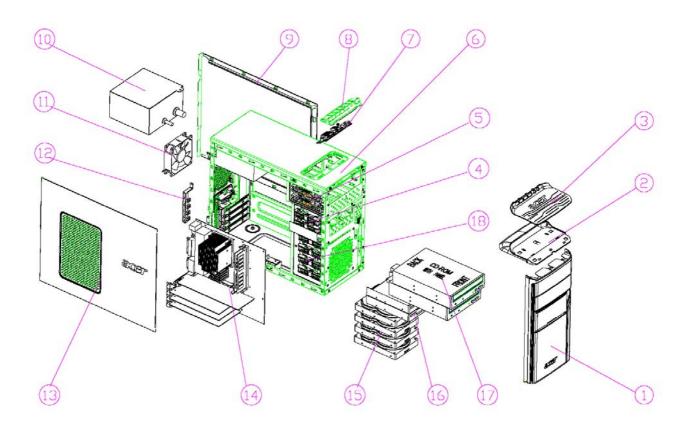
Pin	Signal Name	Pin	Signal Name
1	RESET-	2	Ground
3	DD7	4	DD8
5	DD6	6	DD9
7	DD5	8	DD10
9	DD4	10	DD11
11	DD3	12	DD12
13	DD2	14	DD13
15	DD1	16	DD14
17	DD0	18	DD15
19	Ground	20	Keypin
21	DMARQ	22	Ground
23	DIOW-	24	Ground
25	DIOR-	26	Ground
27	IORDY	28	PSYNC:CSEL
29	DMACK-	30	Ground
31	INTRQ	32	IOCS16-
33	DA1	34	PDIAG-
35	DA0	36	DA2
37	CS1FX-	38	CS3FX-
39	DASP-	40	Ground

# FRU (Field Replaceable Unit) List

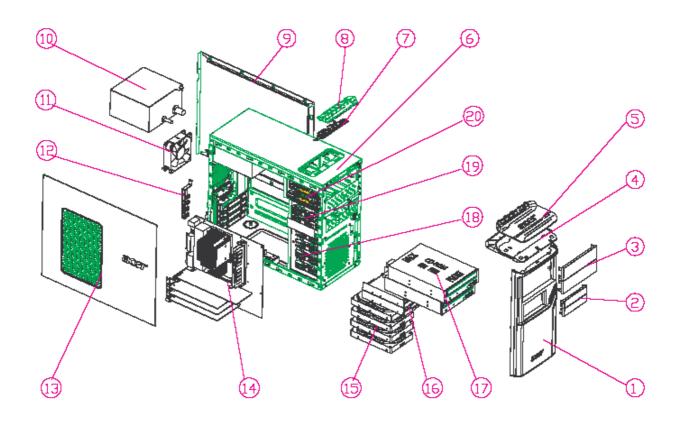
This chapter gives you the FRU (Field Replaceable Unit) listing in global configurations of **Aspire M5200/3200/1200**. Refer to this chapter whenever ordering for parts to repair or for RMA (Return Merchandise Authorization).

NOTE: Please note WHEN ORDERING FRU PARTS, that you should check the most up-to-date information available on your regional web or channel. For whatever reasons a part number change is made, it will not be noted in the printed Service Guide. For ACER-AUTHORIZED SERVICE PROVIDERS, your Acer office may have a DIFFERENT part number code to those given in the FRU list of this printed Service Guide. You MUST use the local FRU list provided by your regional Acer office to order FRU parts for repair and service of customer machines.

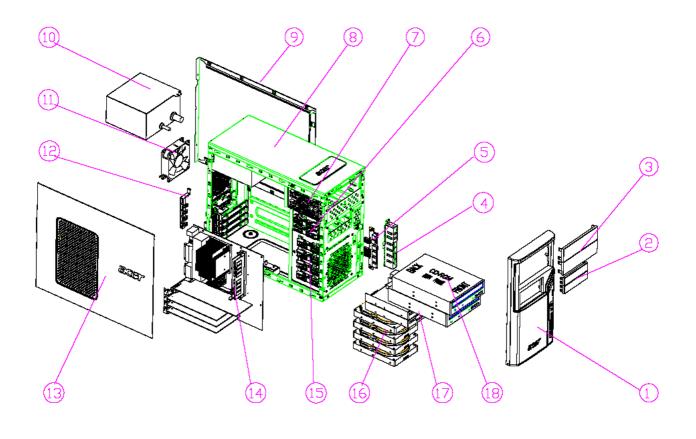
# Exploded Diagram



NO	DESCRIPTION	NO	DESCRIPTION
1	AM50_MAIN_BEZEL	10	POWER SUPPLY
2	AM50_USB	11	FAN
3	AM50_USB_PANEL	12	PCI-BRACKET
4	FDD_LOCK_SLIDE	13	LEFT SIDE DOOR
5	CD_ROM LOCK SLIDE	14	HOTHER BOARD
6	CHASSIS	15	HDD
7	USB_PCB_ASN	16	3.5 DEVICE
8	USB-SHIELDING	17	CD-ROM
9	RIGHT SIDE DOCR	18	HDD-LOCK-SLIDE



NO	DESCRIPTION	NO	DESCRIPTION
1	AM30-MAIN-BEZEL	11	FAN
2	3-25-COVER	12	PCI-BRACKET
3	5-25-COVER	13	LEFT SIDE DOOR
4	AM30-USB	14	NOTHERBOARD
5	AM30-USB-PENEL	15	HDD
6	CHASSIS	16	3.5' DEVICE
7	USB-PCE-ASN	17	CD-ROM
8	USB-SHTELDING	18	HDD-LOCK-SLIDE
9	RIGHT SIDE DOOR	19	FDD-LOCK-SLTDE
10	POWER SUPPLY	20	CD-ROM LOCK SLIDE



NO	DESCRIPTION	NO	DESCRIPTION
1	AM10_MAIN_BEZEL	11	FAN
2	3.25-COVER	12	PCI-BRACKET
3	5.25-COVER	13	LEFT SIDE DOOR
4	USB-SHIELDING	14	MOTHERBOARD
5	USB-PCB-ASM	15	HDD-LOCK-SLIDE
6	FDD-LOCK-SLIDE	16	HDD
7	CD-ROM LOCK SLIDE	17	3.5' DEVICE
8	CHASSIS	18	CD-ROM
9	RIGHT SIDE DOOR	19	
10	POWER SUPPLY	20	